

**DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch  
690 Walnut Ave.St. 150  
Vallejo, CA 94592-1133  
(707) 649-5453  
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 99.28**WELDING INSPECTION REPORT****Resident Engineer:**Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-020768**Date Inspected:** 15-Feb-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1900**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC) Chanxing Island**Location:** Shanghai, China**CWI Name:** Mr. ZHU ZHONG HAI**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** OBG Segment**Summary of Items Observed:**

On this date CALTRANS OSM Quality Assurance (QA) Inspector Santhosh Ramakrishna Pillai was present during the times noted above for observations relative to fabrication work of the Self Anchored Suspension (SAS) Superstructure being performed by Zhenhua Port Machinery Company (ZPMC) at Changxing Island in Shanghai, China.

This QA inspector randomly observed the following work:

**1. INPROCESS:**

Orthotropic Box Girder (OBG) at Trial Assembly Area:

ZPMC welding personnel performing Shielded Metal Arc Welding of Repair weld for the bottom plate to bottom plate transverse splice weld joint located on 12BE+12CE. The weld is designated as OBE12C-001. The welder is identified as 044515. ZPMC QC Mr. WANG LI YANG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-1G (1F)-FCM-Repair-1. The weld repair report number is named as WR20190.

ZPMC welding personnel performing Shielded Metal Arc Welding of Base Metal Repair weld (temporary attachment removal area) near the bottom plate to side plate hold back weld joint located on 12BW+12CW. The location near the weld is designated as SEG3005A-004(12BW) & SEG3006A-011(12CW). The welder is

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identified as 040611. ZPMC QC Mr. ZHOU PENG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1. The weld repair report number is named as CWR-2126.

ZPMC welding personnel performing Shielded Metal Arc Welding of Base Metal Repair weld (temporary attachment removal area) near the bottom plate to side plate hold back weld joint located on 12BE+12CE. The location near the weld is designated as SEG3002A-001(12BE) & SEG3003A-011(12CE). The welder is identified as 050289. ZPMC QC Mr. ZHOU PENG was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-345-SMAW-4G (4F)-FCM-Repair-1. The weld repair report number is named as CWR-2126.

ZPMC welding personnel performing Air Carbon Arc Gouging on UT Repair weld for the deck plate to deck plate transverse splice weld joint located on 12BE+12CE. The weld is designated as OBE12A-003. ZPMC QC Mr. WANG LI YANG was onsite monitoring the gouging variables.

Orthotropic Box Girder (OBG) at Bay-14 Area:

ZPMC welding personnel performing Flux Core Arc Welding of Complete Joint Penetration welds joining the side plate to corner assembly weld joint located on 13CE at cross beam side. The weld is designated as SEG3015A-014. The welder is identified as 067734. ZPMC QC Mr. ZHANG LING was onsite monitoring the welding variables. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-B-T-2231T-ESAB-1.

ZPMC welding personnel performing Shielded Metal Arc Welding of Complete Joint Penetration welds joining the edge plate to deck plate hold back weld joint located on 13CE at cross beam side. The weld is designated as CA3016A-098. The welder is identified as 037796. ZPMC QC Mr. ZHANG LING was onsite monitoring the welding variables. The inprocess Shielded Metal Arc Welding appears to be progressing in compliance with WPS-B-P-2212-Tc-U4b-FCM-1.

ZPMC welding personnel performing Flux Core Arc Welding of Complete Joint Penetration welds joining the anchorage plate to vertical shear plate weld joint located on 14W at counter weight side. The weld is designated as SEG3020BB-115. The welder is identified as 066421. ZPMC QC Mr. ZHU LIN was onsite monitoring the welding variables. The inprocess Flux Core Arc Welding appears to be progressing in compliance with WPS-B-T-2233-ESAB.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

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### Summary of Conversations:

No relevant conversations were reported on this date.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang 150-0042-2372, who represents the Office of Structural Materials for your project.

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**Inspected By:** Pillai,Santosh

Quality Assurance Inspector

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**Reviewed By:** Miller,Mark

QA Reviewer